been relieved or lessened. There has been no indication in the character or frequency of the pulse, nor in the general condition of the patient, that a specific for the toxæmia had been administered. During the first three months of 1894 the death-rate at this hospital without antitoxin was 32 per cent.; during the corresponding months of 1895, with antitoxin treatment, the death-rate was 28 per cent., and this, too, when diphtheria was far milder than it was one year previous. The serum used in the early part of the antitoxin treatment was so weak that it was stated that but little could be expected of it. The record showed that the cases treated with the weaker serum did better than those which were treated with the stronger serum, and that those who had the smaller dose of serum did better than those who had a larger dose. In fact, a careful study of the individual cases will show that there is no relation between the antitoxin treatment and the recoveries. As to the untoward or unfavorable effects of the antitoxin treatment, it was found that babies who presented but slight clinical evidence of diphtheria after receiving antitoxin may develop an antitoxin infection, of which the symptoms may gradually subside, leaving them emaciated and extremely anæmic, or there may be a fluctuating temperature ranging from 99° to 106.8° F., and existing for days together. Horse-serum dissolves human blood-corpuscles, and thereby produces new elements of decomposition. The condition of these babies was one of antitoxin septicæmia, brought about by the influence of the antitoxin in the blood. Further evidence of septicæmia is to be found in occasional suppurations showing a temperature-range such as has not been seen since the introduction of aseptic surgery. In some cases of death the necropsy has shown that the patients had recovered from the diphtheria, but had died from pneumonia; this pneumonia is that of septicæmia, and this in turn was induced by antitoxin. Another danger is that of nephritis, which can be fatal, as was shown by Lennox Browne (six out of eight cases treated by antitoxin) and Benda (thirty-three out of thirty-nine deaths from the antitoxin treatment). Further dangers may arise from its action upon the nervous system, and varies according to individual susceptibility; death may speedily ensue. The use of the antitoxin may be immediately dangerous to life through its influence on the kidneys and on the nervous system, and, remotely, through its influence on the blood.—*New York Medical Record*, 1895, vol. xlvii. p. 501.

THE TREATMENT OF DIPHTHERIA.

DR. D. BRADEN KYLE states that the infected mucous membrane surfaces should be frequently and thoroughly cleansed. Loeffler has been able with his toluol solution to obtain as good results as with the serum treatment. The solution consists of alcohol 60, toluol 36, liquor ferri sesquichloridi 4, which is highly germicidal in that it will destroy pure cultures of the Klebs-Loeffler bacillus and also of the germs closely allied to this disease, especially the streptococcus, when exposed to it for only a few seconds. The infected areas are swabbed with this solution every two to four hours, the membrane readily dissolving. Equally good results have been obtained by substituting creolin for the iron, and menthol can be added to relieve the pain.—*Therapeutic Gazette*, 1895, No. 4, p. 225.

THE TREATMENT OF LUPUS BY CANTHARIDIN.

Dr. O. Liebrich states that a remedy for tuberculosis must be something other than that which destroys tubercle bacilli alone, but must have as well some effect upon the vital forces. After presenting the peculiar action of the drug and showing that medicinal doses, even if continued for two and one-half years (case cited), will not give rise to any pathological changes in the kidneys, he points out its beneficial effects upon general symptoms. Cantharidin can be given internally as a sodium cantharidinate or as the pure drug dissolved in tincture of orange-peel (1 to 5000), or by hypodermatic injection. From the results of his treatment he concludes that the dogma that lupus vulgaris cannot be cured without cicatricial tissue is untrue, and demonstrates that this drug has a curative action.—*Therapeutische Monatshefte*, 1895, Heft 4, S. 167.

LOSOPHAN IN DERMATOLOGY.

Dr. I. Abbott Cantrell has experimented with this drug, which is tri-iodocresol, and is produced by the action of iodine upon m-oxytoluic acid, in the presence of an alkali. It was used as an ointment in from 2 to 5 per cent. with petrolatum; as dusting-powder with starch, 1 to 15 per cent.; in solution in alcohol and water, 1 to 5 per cent. It was used in 111 cases: eczema, 43; scabies, 23; pediculosis vestimentorum, 5; ringworm, 16; impetigo contagiosa, 8; alopecia areata, 2; dermatitis venenata, 2; furuncle, 2; and seborrhœa, 2 cases. From this experience he concludes: 1. It has proved to be entirely inefficacious in almost every disease of the skin. 2. Tinea sycosis was cured in one instance, but after two months' treatment. 3. It possibly may be beneficial in acne. 4. It is a waste of time for any one to make use of it in treating diseases of the skin.—*Therapeutic Gazette*, 1895, No. 4, p. 221.

MALT EXTRACT AND DIASTASE.

Prof. John M. Francis states that malt extract contains not starch but dextrin, soluble starch, and maltose, small quantities of albumin, gum, and inorganic salts, and, more important than all, the portion of diastase which was not consumed by the starch or destroyed in the process of evaporation. If it is marketed in the liquid form a preservative is added, usually alcohol, sometimes glycerin, which does not serve the purpose so well, and in the cheaper forms, borax, boric acid, and salicylic acid. No matter what precautions are taken they gradually but surely lose their diastasic activity. These extracts have two functions; to afford a supply of amylaceous food for a weak and diseased stomach, and in a predigested condition, ready to be assimilated without the effort of physiological preparation—in this *rôle* its field of usefulness is very broad. Second, we may employ malt extract to afford an extra supply of diastase for the digestion of food which has already been ingested, and which the stomach seems unable to dispose of in the proper manner. Nearly two-thirds of our food consists of starches, and we probably overlook the greater source of digestive troubles in our efforts to assure the disintegration of the fats and proteids. If, then, there is frequent need of an extra supply of diastase, it naturally follows that the best malt